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EXAMINER	
VU, THANH T	

ART UNIT	PAPER NUMBER
2174	16

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/540,069	ROBERTSON ET AL.
	Examiner	Art Unit
	Thanh T. Vu	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,19-31,34-38 and 40-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *31 and 34-36* is/are allowed.

6)☒ Claim(s) *1-17, 19-30, 37-38, 40-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This communication is responsive to Amendment C, Filed 10/23/2003.

Claims 1-17, 19-31, 34-38, and 40-42 are pending in this application. In the Amendment C, Claim 39 was cancelled claim 42 was added, and claims 1, 20, 28, 37, 38, and 40 were amended. This action is made Final.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 20, 29, 37, 38 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Card et al. ("Card", U.S. Pat. No. 5,838,326).

Per claim 1, Card teaches a method of generating a display on a computer screen in a computer system, the method comprising: displaying a three-dimensional environment (fig. 2a); displaying at least two tasks in the three dimensional environment, each task capable of including an image of at least two windows, at least one task comprising an ordered stack of windows in which the windows are automatically aligned and a loose stack of windows in which the alignment between the windows is set by a user (fig. 2a; tasks: a pile of individual web pages, document collection or a WebBook, three dimensional objects; bookcase 220, "desk" 202, "air"203; col. 6, lines 15-40; col. 10, lines 54-60); displaying the movement of one of the tasks in the three dimensional environment in response to input from a user (fig. 3; col. 7, lines 63-67).

Claim 20 is similar in scope to claim 1 and therefore is rejected under similar rationale.

Per claim 29, Card teaches the computer-readable medium of claim 20 wherein the move task component comprises a link task image to cursor sub-component that is capable of linking the task image to a cursor displayed in the three-dimensional environment so that the task image moves with the cursor in the three-dimensional environment (figs. 4-5; col. 9, lines 10-25).

Per claim 37, Card teaches a computer-readable medium having computer executable components comprising: a environment display component capable of displaying a three-dimensional environment on a computer screen, the three-dimensional environment comprising at least one stage and at least one non-focus task comprising images of at least two windows (fig. 2a; focus space 201; non-focus space 202, 203, 220; three dimensional objects; bookcase 220, "desk" 202, "air"203); a movement component capable of displaying animated movement of a non-focus task toward a stage (col. 7, lines 33-39); and a conversion component capable of converting the non-focus task into a focus task when the non-focus task reaches the stage (col. 6, lines 25-43; col. 7, lines 33-39; col. 7, lines 63-67); and a focus conversion component capable of converting a previous focus task on the stage into a converted non-focus task, the focus conversion component comprising a snapshot component capable of replacing the previous focus task with an image of the previous focus task (col. 7, lines 33-39; col. 7, lines 63-67; col. 8, lines 34-36; the examiner interprets a snapshot component capable of replacing the previous focus task with an image of the previous focus task is that when the WebBook is re-opened it will automatically open to the last page viewed).

Per claim 38, Card teaches the computer-readable medium of claim 37 further comprising: a focus conversion component capable of converting a previous focus task on the

stage into a converted non-focus task (col. 7, lines 33-39; col. 7, lines 63-67); and wherein the movement component is capable of displaying animated movement of the converted non-focus task away from the stage (col. 7, lines 33-39).

Per claim 42, Card teaches the method of claim 1 wherein displaying at least two tasks comprises displaying an image of a task on a three-dimensional object (fig. 2a; tasks: a pile of individual web pages, document collection or a WebBook, three dimensional objects; bookcase 220, "desk" 202, "air"203; col. 6, lines 15-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-6, 8-9, 21-23, 25-28, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Marrin et al. (U.S. Pat No. 5,808,613).

Claims 2-3, Card teaches the method of claim 1, but doesn't specifically teach a method for displaying a three-dimensional environment comprises displaying the three-dimensional environment from the point of view of a camera in the three-dimensional environment and a method for moving the camera in the three-dimensional environment on input from the user. However, Marrin teaches a method for displaying a three-dimensional environment comprises displaying the three-dimensional environment from the point of view of a camera in the three-

dimensional environment and a method for moving the camera in the three-dimensional environment on input from the user (col. 3, lines 60-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Marrin in the invention of Card because it provides users navigational abilities to browse through the three-dimensional world.

Per claim 4, Marrin teaches the method of claim 3 wherein moving the camera comprises moving the camera to a preset location in the three-dimensional environment such that the user does not steer the camera to the location (col. 4, lines 30-35).

Per claim 5, Marrin teaches the method of claim 3 further comprising displaying a movement control in the three-dimensional environment and wherein moving the camera comprises moving the camera in response to the user selecting a movement control (fig. 2; items: 224, 232 and 254).

Per claim 6, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying an arrow control that points in a direction of possible movement for the camera and wherein moving the camera comprises moving the camera in the direction pointed to by the arrow control when the user selects the arrow control (fig. 2; item: 232; col. 6, lines 36-44).

Per claim 8, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying a home control and wherein moving the camera comprises moving the camera to a preset position in the three-dimensional environment when the user selects the home control (fig. 3; col. 5, lines 34-39).

Per claim 9, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying overview control and wherein moving the camera comprises moving the camera to a position where the user can view the entire three-dimensional environment when the user selects the overview control (col. 5, lines 56-60).

Claim 21 is similar in scope to claims 2 and 3 and therefore is rejected under similar rationale.

Claims 22-23 and 25-27 are similar in scope to claims 5-9 and 4 respectively and therefore are rejected under similar rationale.

Per claim 28, Card teaches the computer-readable medium of claim 21 wherein the preset position is located in front of a focus task in the three-dimensional environment, the focus task comprising windows that the user can manipulate (fig. 2a; col. 6, lines 25-29; col. 7, lines 5-10).

Claim 40 is rejected under the same rationale as claim 8.

Claims 7, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Marrin et al. (U.S. Pat No. 5,808,613) and further in view of Matsuda(U.S. Pat No.6,346,956).

Per Claim 7, Card and Marrin teach the method of claim 6, but do not teach a method of displaying an image of a human figure proximate the arrow control. However, Matsuda teaches a method of using a human figure in a three-dimensional environment (fig. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a human figure proximate the arrow control in the invention of Card and Marrin because it allows a user to see his position and view point in a three-dimensional world.

Claim 24 is similar in scope to claim 7 and therefore is rejected under similar rationale.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Marrin et al. (U.S. Pat No. 5,808,613) and further in view of Horvitz et al.("Horvitz" U.S. Pat No.5,880,733).

Claim 10, Card and Marrin teaches the method of claim 5, but do not teach the method of using a touch-sensitive input device indicative of a user touching the input device and displaying the movement control in response to the signal. However, Horvitz teaches the method of using touch-sensitive input device to receive a user's input (col. 6, lines 60-65; col. 12, lines 20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a touch-sensitive device as taught by Horvitz in the invention of Card and Marrin as another choice of implementation to receive signals from the users.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Marrin et al. (U.S. Pat No. 5,808,613), in view of Horvitz et al.("Horvitz" U.S. Pat No.5,880,733) and further in view of Windows NT 4 Workstation ("Windows NT").

Per claim 11, Card, Marrin and Horvitz teaches the method of claim 10, but does not teach receiving a second signal from the touch-sensitive input device indicative of the user not touching the input device and removing the movement control from the display in response to the second signal. However, Windows NT teaches a method of removing a control in response to a signal from the user not touching the input device (page 41, item 4; it is inherent that the

rectangular draw control is removed when the user is releasing or not touching the input device). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Windows NT in the invention of Card, Marrin, and Horvitz in order to provide an interactive user interface when the user manipulates objects on the desktop.

Claims 12-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Sugiyama et al. ("Sugiyama", U.S. Pat No. 6,002,403). Card teaches the method of claim 1, but does not teach the method of displaying a three-dimensional environment comprises displaying a room in the three-dimensional environment by displaying a set of surfaces. However, Sugiyama teaches the method of displaying a three-dimensional environment comprises displaying a room in the three-dimensional environment by displaying a set of surfaces. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to the method as taught by Sugiyama in the invention of Card because it provides a graphical user interface which enable the user to intuitively recognize documents arranged in the 3-D space so that the user can quickly identify and interact with objects in the 3D environment.

Per claim 12, Sugiyama teaches the method of displaying a three-dimensional environment comprises displaying a room in the three-dimensional environment by displaying a set of surfaces comprising a floor (fig. 4A).

Per claim 13, Sugiyama teaches the method of displaying a room further comprises displaying a right side wall and a left side wall (fig. 4A; items: 112 and 113).

Per claim 14, Sugiyama teaches the method of displaying a room further comprises displaying a ceiling connecting the right side wall to the left side wall (fig. 7; ceiling 114).

Per claim 16, Sugiyama teaches the method of displaying the movement of one of the tasks comprises displaying the movement of the task along one of the surfaces from the set of surfaces (figs. 4a and 5; movement of task 112 from left side wall to the center and task 111 moves from center to right side wall).

Per claim 17, Sugiyama teaches the method of displaying the movement of one of the tasks comprises displaying the movement of the task from one of the surfaces from the set of surfaces to an adjacent surface from the set of surfaces (figs. 5 and 7; items 112, 113; col. 6, lines 11-13).

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Sugiyama et al. ("Sugiyama", U.S. Pat No. 6,002,403) and further in view of Horvitz et al. ("Horvitz" U.S. Pat No.5,880,733).

Claim 15, Card and Sugiyama teaches the method of claim 12, but does not teach a method wherein displaying a three-dimensional environment further comprises displaying a plurality of conjoined rooms wherein each room has a different appearance. However, Horvitz teaches a method wherein displaying a three-dimensional environment further comprises displaying a plurality of conjoined rooms wherein each room has a different appearance (fig. 13; col. 19, lines 30-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Horvitz in the invention of Card and

Sugiyama in order to provide an enhance display system for displaying applications and documents in a computer system.

Claims 19, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Horvitz et al. ("Horvitz" U.S. Pat No.5,880,733).

Claim 19, Card teaches the method of claim 1, but does not teach the method comprising displaying a menu comprising a task movement selection and wherein displaying the movement of one of the tasks is based on the user selecting the task movement selection. However, Horvitz teaches the method comprising displaying a menu comprising a task movement selection and wherein displaying the movement of one of the tasks is based on the user selecting the task movement selection (fig. 3; col. 15, lines 15-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Horvitz in the invention of Card in order to user menus as a means of providing user with an easily learned, easy to use alternative to memorizing program commands and their appropriate usage.

Claim 30 is rejected under the same rationale as claim 19.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Card et al. ("Card", U.S. Pat. No. 5,838,326) in view of Marrin et al. (U.S. Pat No. 5,808,613) and further in view of Horvitz et al. ("Horvitz" U.S. Pat No.5,880,733).

Claim 41, Card teaches the computer-readable medium of claim 37, but does not teach the computer-readable medium further comprising a menu generation component capable of generating a menu on the display before the movement component displays the animated

movement of the non-focus task, the menu allowing a user to select the non-focus task as a focus task; and a virtual camera movement component capable of moving a virtual camera in the three-dimensional environment to change the point of view of the three-dimensional environment shown on the computer screen so that the non-focus task comes into view after it is selected by the user through the menu component. However, Horvitz teaches the computer-readable medium further comprising a menu generation component capable of generating a menu on the display before the movement component displays the animated movement of the non-focus task, the menu allowing a user to select the non-focus task as a focus task (fig. 3; col. 15, lines 15-21), and Marrin teaches the computer-readable medium further comprising a virtual camera movement component capable of moving a virtual camera in the three-dimensional environment to change the point of view of the three-dimensional environment shown on the computer screen so that the non-focus task comes into view after it is selected by the user through the menu component (col. 3, lines 60-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Horvitz and Marrin in the invention of Card in order to use menus as a means of providing user with an easily learned, easy to use alternative to memorizing program commands and their appropriate usage and in order to provide users navigational abilities to browse through the three-dimensional world.

Allowable Subject Matter

Claims 31, and 34-36 are allowed.

Response to Arguments

Applicants' arguments in the Amendment C have been fully considered but are not persuasive.

Applicant argued the following:

(a) None of the collections of documents in Card provide both an ordered stack of windows and a loose stack of windows.

(b) Card does not show a component that replaces a focus task with an image of a focus task.

The Examiner disagrees for the following reasons:

(a) Card shows both an ordered stacks of windows in which the windows are automatically aligned and a loose stack of windows in which the alignment between the windows is set by a user (col. 10, lines 54-60).

(b) Card shows a component that replaces a focus task with an image of a focus task (col. 8, lines 34-36; the examiner interprets a snapshot component capable of replacing the previous focus task with an image of the previous focus task is that when the WebBook is re-opened it will automatically open to the last page viewed).

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (703)-308-9119. The examiner can normally be reached on Mon-Thur and every other Fri 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

T. Vu
01/05/2004

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